TRINITY SPRINGS LTD. (PWS# 4200083)
SOURCE WATER ASSESSMENT FINAL REPORT

June 29, 2001

State of Idaho
Department of Environmental Quality

Under the Federal Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. The Idaho Department of Environmental Quality is completing the assessments for all Idaho public drinking water systems. The assessment for your particular drinking water source is based on a land use inventory within a 1,000 foot radius of your drinking water source, sensitivity factors associated with the source and characteristics associated with either your aquifer or watershed in which you live.

This report, *Source Water Assessment for Public Water System (PWS) #4200083 located in Elmore County, Idaho*, describes the public drinking water system, the associated potential contaminant sources located within a 1,000' boundary around the drinking water source, and the susceptibility (risk) that may be associated with any potential contaminants. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this system. **The results should not be used as an absolute measure of risk and is not intended to undermine the confidence in your water system.**

The Trinity Springs Ltd. drinking water system consists of a single thermal spring source, which rated a low susceptibility to inorganic compounds, volatile organic compounds, synthetic organic compounds and microbial contaminants. Based on the initial computer generated contaminant source inventory conducted by the DEQ, a single potential contaminant source is located within the 1,000-foot boundary. This site is a geothermal mine located approximately 950 feet from the source. For the purposes of this report, the geothermal mine was not incorporated into the final rating, because the possibility of source water contamination from this site is presumed to be extremely low. However, according to the 1998 Ground Water Under Direct Influence (GWUDI) field survey performed by the Central District Health Department, a septic system is located within 100 feet of the primary spring. This septic system was included as a potential source of contamination for inorganic compounds and microbes.

The possibility that surface water directly influences the spring appears to be very remote. A recent study performed by AGW Consultants concluded that the properties of the water in the primary spring are not consistent with the properties of nearby surface water or shallow groundwater. Additionally, this study also determined that there were no activities located nearby, which could lead to contamination of the drinking water. Furthermore, a 1992 study by Sherl L. Chapman Consulting , Inc. suggested that the water in Trinity Springs would not be adversely affected by short term changes in the water supply. This study also indicated that the thermal spring source is subject to a large amount of pressure forcing hot water upward. Therefore the chance for surface water intrusion is limited to the unlikely scenario of physically drilling into the aquifer and pumping outside water into it. Consequently, the possibility that contaminants could compromise the system is considered to be very minute, so a low susceptibility score was applied to the drinking water system.

A copy of the completed susceptibility analysis for your system along with a map showing any potential contaminant sources is included with this summary. Information regarding the possible contaminants within the 1,000' boundary have been summarized and included in Table 1.

Table 1.

SITE #	Source Description	Source of Information	Potential Contaminants
1	Geothermal Mine	Database Search	N/A

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

For Trinity Springs Ltd., source water protection activities should focus on implementation of practices aimed at continued maintenance of the septic system within the designated source water area. Source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term.

For assistance in developing drinking water protection strategies please contact either the Central District Health Department or the DEQ-Boise Regional Office at 208-373-0550.

POTENTIAL CONTAMINANT INVENTORY
LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as ASuperfund@ is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

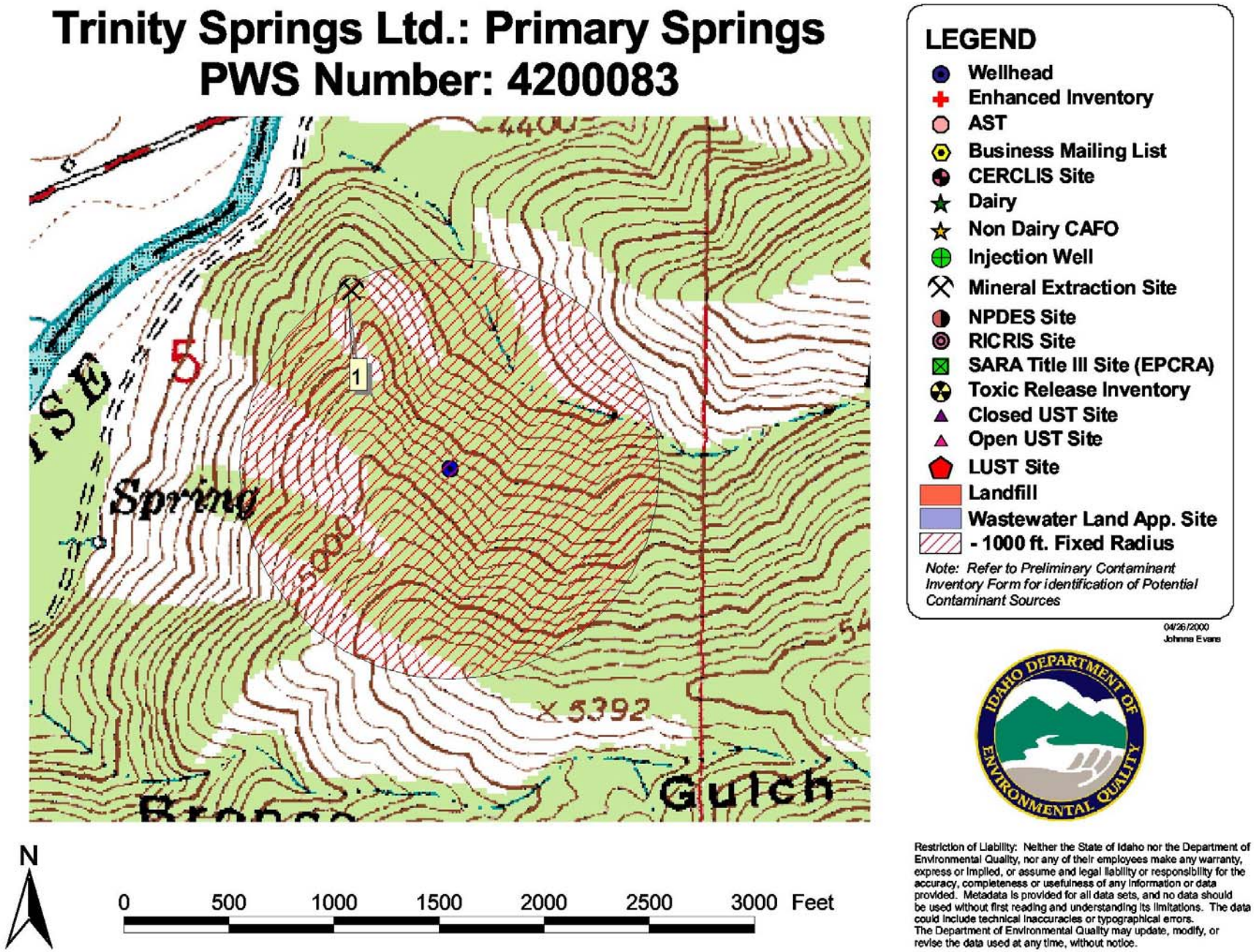
Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.

Figure 1. Trinity Springs Ltd.—Elmore County, Idaho Delineation



The final scores for the susceptibility analysis were determined using the following formulas:

1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.27)

2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.375)

Final Susceptibility Scoring:

0 - 5 Low Susceptibility

6 - 12 Moderate Susceptibility

≥ 13 High Susceptibility

Surface Water Susceptibility Report Public Water System Name : TRINTIY SPRINGS LTD Well# : PRIMARY SPRINGS

Public Water System Number 4200083 6/13/01 2:28:20 PM

1. System Construction		SCORE
Intake structure properly constructred	YES	0
Infiltration gallery or well under the direct influence of Surface Water	YES	0
Total System Construction Score		0

2. Potential Contaminant Source / Land Use		IOC Score	VOC Score	SOC Score	Microbial Score
Predominant land use type (land use or cover)	BASALT FLOW, UNDEVELOPED, OTHER	0	0	0	0
Farm chemical use high	NO	0	0	0	
Significant contaminant sources	YES	1. Septic System			
Sources of class II or III contaminants or microbials	not present	0	0	0	0
Agricultural lands within 500 feet	NO	0	0	0	0
Three or more contaminant sources	NO	0	0	0	0
Sources of turbidity in the watershed	NO	0	0	0	0
Total Potential Contaminant Source / Land Use Score		0	0	0	0
3. Final Susceptibility Source Score		0	0	0	0
4. Final Sourcel Ranking		Low	Low	Low	Low